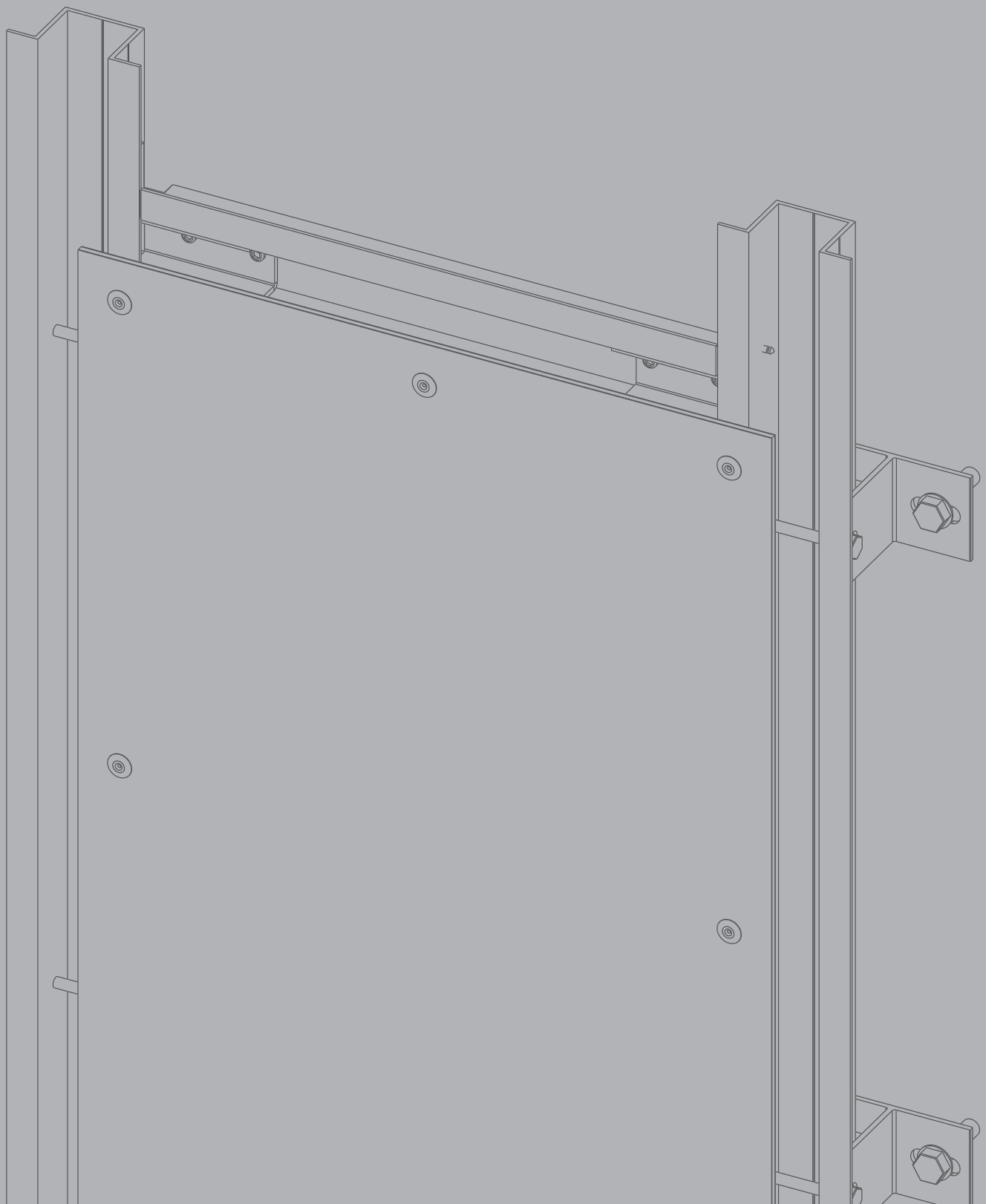
STB-REM
RIVETED SYSTEM



STB-REM SYSTEM
DESCRIPTION

STB-REM is a kit system based on flat panels made from STAC**BOND**® **composite panels for installing ventilated facades.** It is a system with visible fixings which is quick to install and which allows both horizontal and vertical assembly. It is a very versatile system which perfectly suits any architectural layout and offers the possibility to easily cover curving sections. The **STB-REM** system therefore complies with all the requirements to be employed in the most demanding architectural claddings.

The substructure employs **profiles OMEGA** and **spacers DOUBLE T** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC**® has developed specific **INSULATING WEDGES** to place between the spacers DOUBLE T and the vertical face.

The spacers are anchored to the wall using special me-chanical fixings, recommended in each case by the fixings suppliers, and receive the profiles OMEGA as uprights.

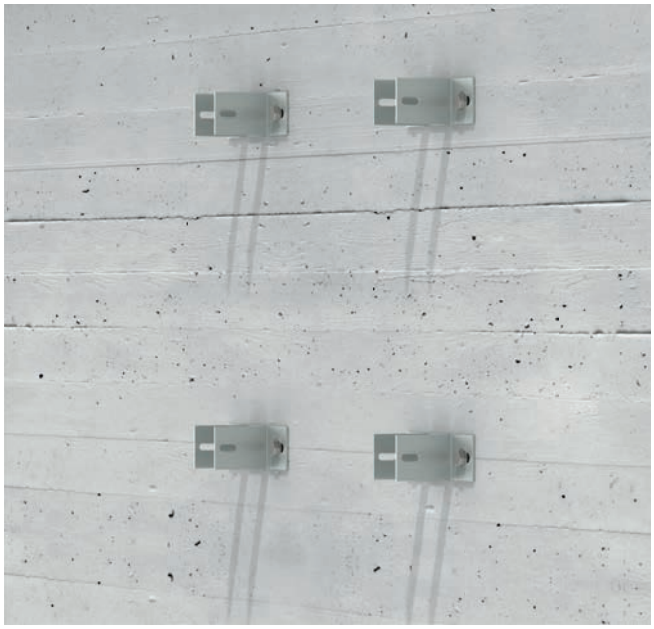
The **STB-REM** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using mounting joints made of1050-H aluminium alloy, or to the vertical face using spacers DOUBLE T.

This substructure with vertical and / or horizontal profiles OMEGA support the STAC**BOND**® composite panel sheets which are riveted at their edges.

STAC® has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed, defining the maximum distances between the profile OMEGA uprights and the number of fixings.

The **STB-REM** system complies with all major international certifications.

ETA-ETE: 15/0655 | Nº 553P/16 | ITB – KOT 2017/0043 | 13/5022 | 2.2/13-1548_V1



SPACERS DOUBLE T

1. The first step is **attaching the spacers DOUBLE T** to the facade. These must be in perfect vertical alignment. The spacers to be used depends on the thermal insulation and the layout / irregularities of the facade. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.

PROFILES OMEGA

2. The profiles OMEGA are screwed to the spacers DOUBLE T. They must be perfectly plumb with the adjustment that the system allows. The first and last fixings must be placed at a maximum of 250 mm from the ends of the profile OMEGA.

HORIZONTAL PROFILES OMEGA

3. Horizontal cross-struts (optional). These profiles are mechanically fixed to the vertical substructure using **mullion joinings STB-REM.** The possibility of creating a bidirectional substructure allows the system to adapt to the requirements of the facade.

ATTACHING STACBOND COMPOSITE PANEL

4. Attaching STAC<u>BOND</u>® composite panel. Once the substructure is in place, the **STAC<u>BOND</u>®** panels are attached to it using rivets. Attention should be paid to the condition and type of rivet to ensure correct dilation of the panels.

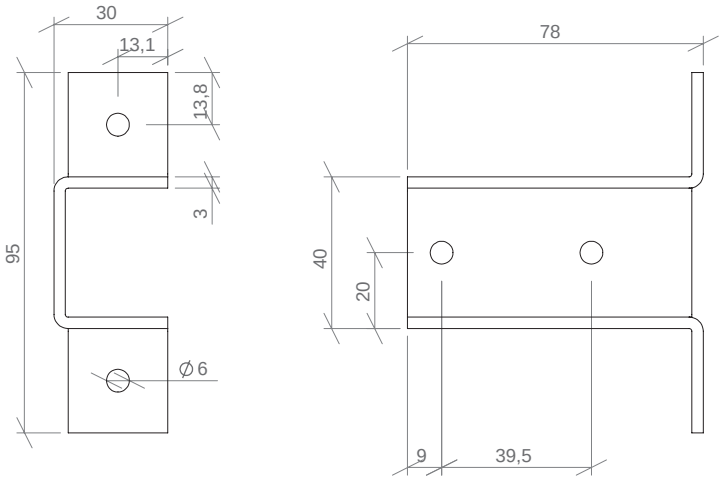
MULLION JOINING STB-REM

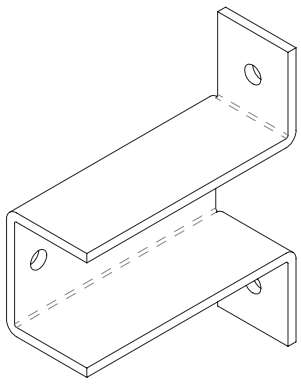
Part made of folded 1050-H aluminium alloy sheet (3 mm) with holes for fixing to the upright and cross-strut profiles OMEGA.

This accessory allows profiles OMEGA to be attached horizontally to the substructure, reducing the number of fixings to the base wall.

Fixing of these spacers is done using ø 4.8 mm blind rivets or ø 4.8 mm self-tapping screws. These coupling parts are compatible with possible dilation of the substructure.

REFERENCE	DESCRIPTION	UNITS/BOX
05.19.020	MULLION JOINING STB-REM	150





Measurements in mm

DILATION OF THE PANEL

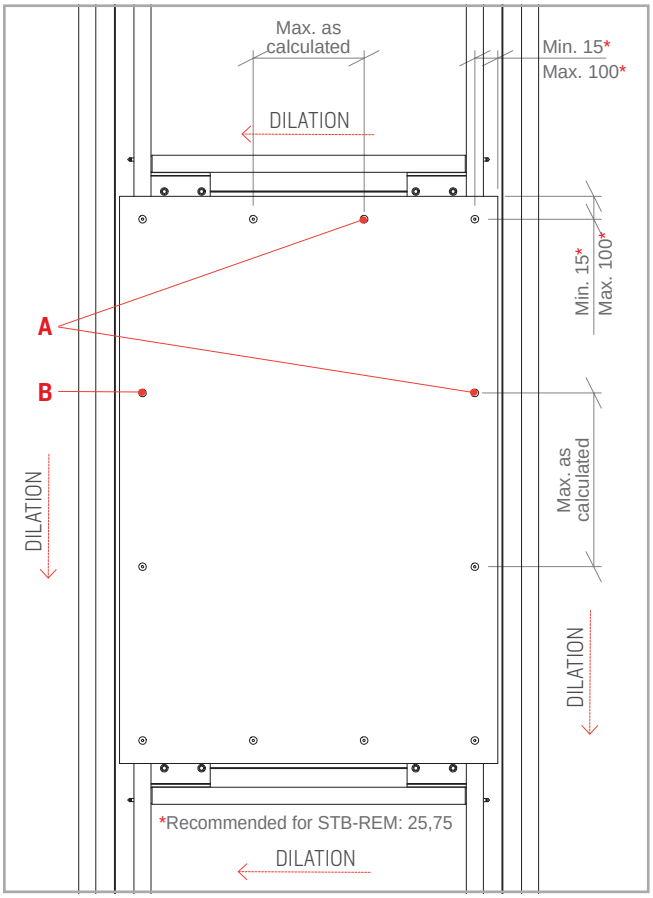
The diagram shows the layout and max. distance of the holes in the **STACBOND**® composite panel.

The panels are set in place by drilling and inserting the corresponding rivet, respecting the difference between the diameter of the drill and the shank of the rivet and also the distances between rivets and the edge of the panel.

To allow movement of the panel and to avoid problems from dilation, it is important to centre the drill holes on the substructure. This allows equal dilation in all directions and does not limit movement. We recommend the use of **centring gauges** to ensure correct hole placement and fixing of rivets.

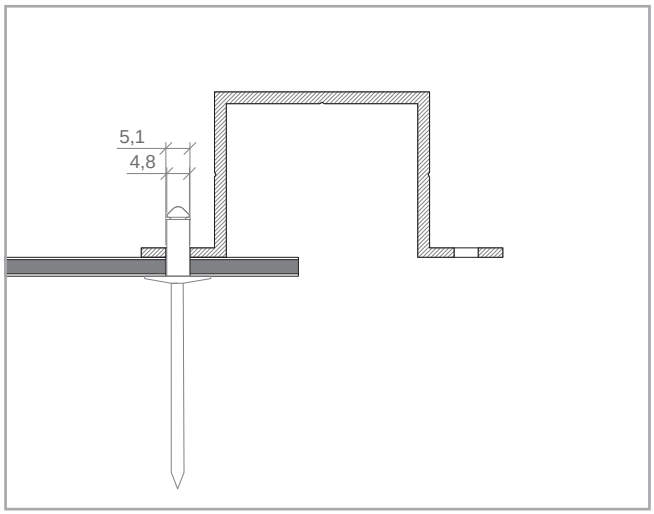
Furthermore, to allow movement in the floating fixing points, it is important to control the rivet clinch strength. We recommend the use of a **spacing nosepiece** which leaves a 0.2 mm gap between the sheet and the fixing, avoiding immobilising fixing points which should be floating.

Rivets and screws specified by **STAC**® should be used.

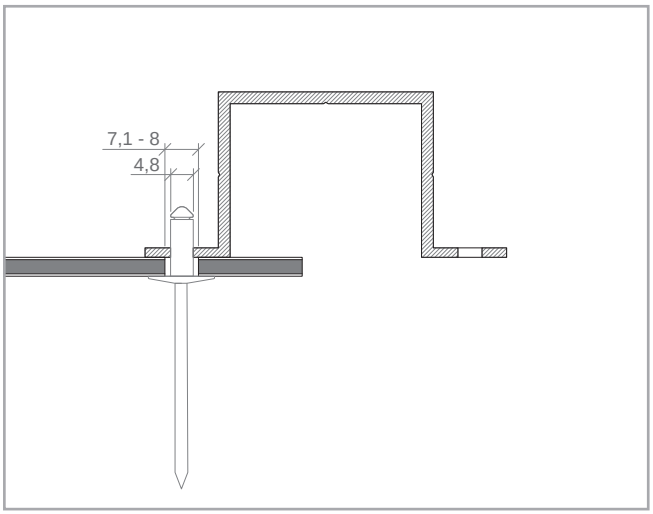


Note: other rivets and screws may be used providing that their mechanical characteristics are equal or greater than those specified by **STAC**®.

A. FIXED ANCHORING POINTS



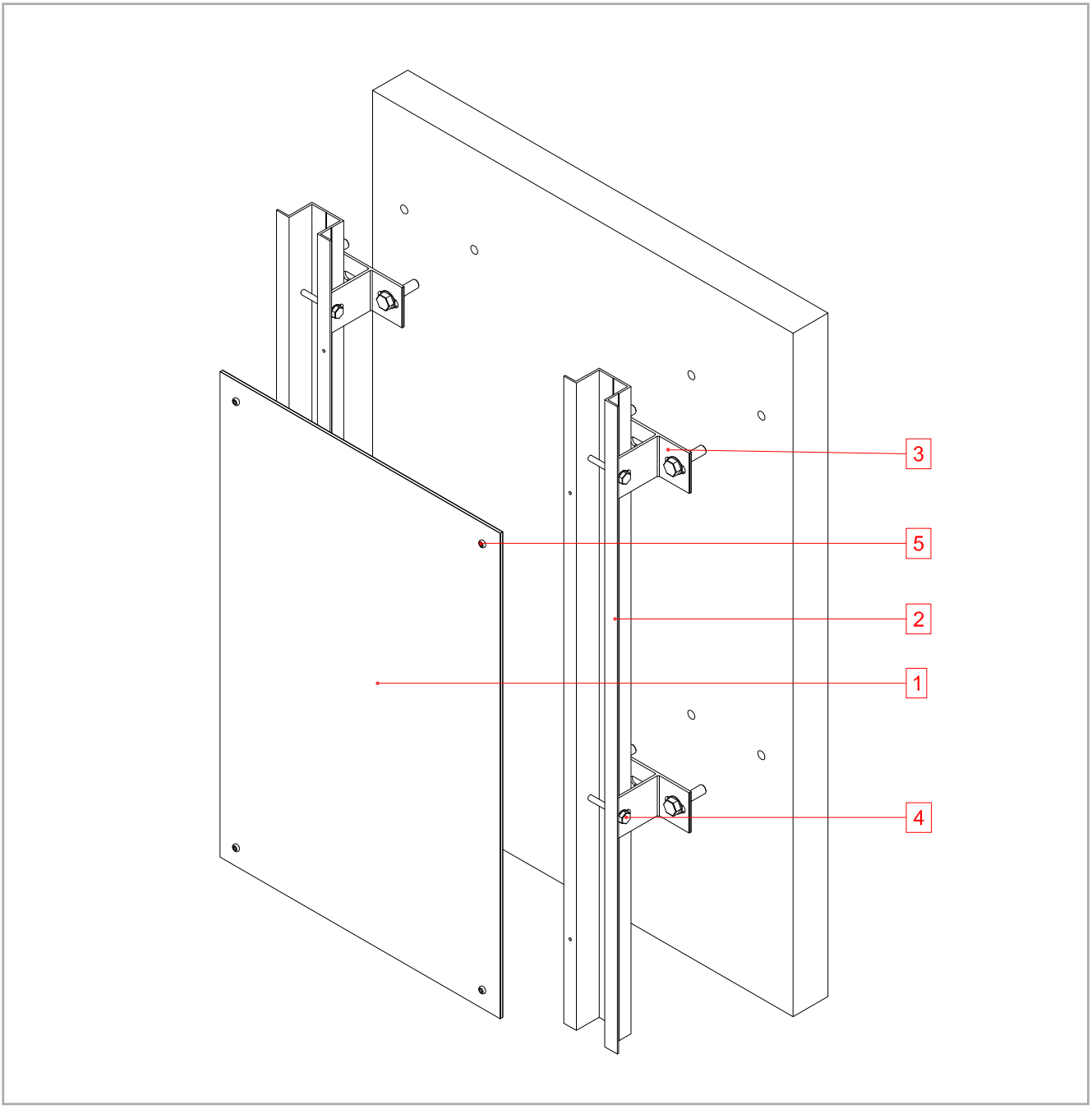
B. MOBILE ANCHORING POINTS



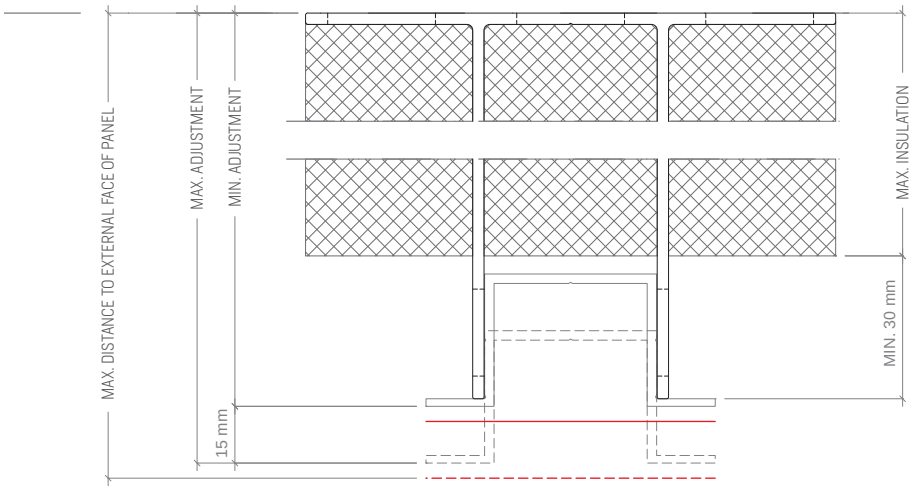
Measurements in mm

The larger diameter hole drilled in the **STACBOND**® composite panel allows dilation to be absorbed.

STB-REM SYSTEM
INSTALLATION DIAGRAM



Nº	NAME
1	STAC**BOND**® composite panel
2	Profile OMEGA
3	Spacer DOUBLE T
4	Through screw M 6 x 60/70
5	Blind rivet



SPACER DOUBLE T *		DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		RECOMMENDED INSULATION (mm) WITH 30 mm AIR CAVITY
REF.	PART	MIN.	MAX	
05.19.004	SPACER DOUBLE T 59	63	78	30
05.19.005	SPACER DOUBLE T 74	78	93	50
05.19.006	SPACER DOUBLE T 891	93	108	60
05.19.007	SPACER DOUBLE T 104	108	123	80
05.19.030	SPACER DOUBLE T 119	123	138	100
05.19.031	SPACER DOUBLE T 134	138	153	110
05.19.032	SPACER DOUBLE T 149	153	168	120
05.19.033	SPACER DOUBLE T 164	168	183	140
05.19.034	SPACER DOUBLE T 179	183	198	160
05.19.035	SPACER DOUBLE T 194	198	213	170
05.19.036	SPACER DOUBLE T 209	213	228	180
05.19.037	SPACER DOUBLE T 224	228	243	200
05.19.038	SPACER DOUBLE T 239	243	258	220
05.19.039	SPACER DOUBLE T 254	258	273	230

SPACER U *		DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		RECOMMENDED INSULATION (mm) WITH 30 mm AIR CAVITY
REF.	PART	MIN.	MAX	
05.19.046	SPACER U 59	63	78	30
05.19.047	SPACER U 74	78	93	50

STB-REM SYSTEM
ACCESORIES

PROFILES

REF.	PART	PAGE
05.19.003	PROFILE OMEGA	106

FASTENING ACCESSORIES

REF.	PART	PAGE
STB-FIJA-201	RIVETER NOSEPIECE (RIVETS SSO-D15)	112
STB-FIJA-202	RIVETER NOSEPIECE (RIVETS AP)	
STB-FIJA-203	DUAL DIA. DRILL BIT (HSS-7,0/5,1x74)	
STB-FIJA-204	DEPTH LOCATOR 16x18	
STB-FIJA-205	CENTRING GAUGE (DG-146x20-7.0)	
STB-FIJA-206	REPLACEMENT NOSE PIECE FOR CENTRING GAUGE ø 6.9 mm	
STB-FIJA-207	SPECIAL BIT FOR THE CENTRING GAUGE (HS-5.1x62/26)	
STB-FIJA-208	DRIVER BIT T20WW-25-HEX1/4"	
STB-FIJA-209	MANUAL CENTRING GAUGE FOR SCREWS SLA3	
STB-FIJA-210	SOCKET IRIUS G-00106.07	113
STB-T0100	SECURITY SCREW 4.8x19 INOX HEAD TORX SLA3/6-S-D12-4.8x19	
STB-R0100	BLIND RIVET ISO 15977 D5x12 CAB. 14 mm ALU/INOX AP14-S-5,.0x12	
STB-R0200	FACADE RIVET HEAD 15 mm INOX/INOX A4 5x14 SSO-D15-50140	

AUXILIARY ELEMENTS

REF.	PART	PAGE
05.19.020	MULLION JOINING STB-REM	110

SPACERS

REF.	PART	PAGE
05.19.004	SPACER DOUBLE T 59	108
05.19.005	SPACER DOUBLE T 74	
05.19.006	SPACER DOUBLE T 89	
05.19.007	SPACER DOUBLE T 104	
05.19.030	SPACER DOUBLE T 119	
05.19.031	SPACER DOUBLE T 134	
05.19.032	SPACER DOUBLE T 149	
05.19.033	SPACER DOUBLE T 164	
05.19.034	SPACER DOUBLE T 179	
05.19.035	SPACER DOUBLE T 194	
05.19.036	SPACER DOUBLE T 209	
05.19.037	SPACER DOUBLE T 224	
05.19.038	SPACER DOUBLE T 239	
05.19.039	SPACER DOUBLE T 254	
05.19.030	SPACER U 46	109
05.19.031	SPACER U 47	

INSULATING WEDGES

REF.	PART	PAGE
05.19.071	**3 x** GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.067 / 05.19.069 / 05.19.073	114
05.19.005	INSULATING WEDGE FOR SPACERS **U *** WITH REF.: 05.19.046 / 05.19.047	
05.19.069	INSULATING WEDGE FOR SPACERS **DOUBLE T *** WITH REF.: 05.19.030 / 05.19.031 / 05.19.032 / 05.19.033 / 05.19.034 / 05.19.035 / 05.19.036 / 05.19.037 / 05.19.038 / 05.19.039	
05.19.073	INSULATING WEDGE FOR SPACERS **DOUBLE T *** WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007	

INFORMATION AND SALES

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